

# Maximizing Your Fuel Efficiency with EcoSystems

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Emissions Technology of Texas, LLC  
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# What Is EcoSystem?

- A retrofit fuel line device that increases the volatility (ability to vaporize) of any petroleum based fuel, causing it to burn more efficiently and completely in the engine.
- The device consists of a small steel tube with a series of closely packed perforated copper discs stacked from one end to the other. These discs do not impede fuel flow or affect fuel pressure. As the fuel passes through the discs, it is agitated. This process releases the hydrocarbon bonds creating a more readily combustible fuel.

# ECO #1

- For use on 4 and 6 cylinder gasoline engines, motorcycles, jet skis, generators, etc.
- Eco shown with 3/8 barbed ends.



# ECO #2

- For use on 6 and 8 cylinder gasoline engines such as police cars, pickups, personal autos.
- Eco #2 shown with Gates Quick Disconnects



# ECO #3

- For use on high performance V-8 gasoline engines, and medium diesel engines such as powerstrokes, school buses, tandem trucks, etc.
- Eco #3 shown with 5/16 quick disconnect.



# ECO #4

- For use on long hauls, heavy equipment, off road equipment, etc.
- Eco #4 shown with JIC #10 fittings.



# Results

- Enhanced Engine Performance
- Increased Fuel Economy
- Less Harmful Exhaust Emissions

# The EcoSystem Unit

- Attaches to the fuel line of virtually any vehicle or piece of equipment with an internal combustion engine
- As the fuel passes through it, a reaction is created that raises the Reid Vapor Pressure (RVP) of the fuel causing it to burn more completely, cleanly, and efficiently
- It has been proven to be effective with gasoline, diesel, Purinox, CNG, propane, and other petroleum based fuels



# Key Features

- The device enhances the fuel you are currently using
- Does not require modifications to any operating system
- Can be installed in about 20 minutes and is good for the life of the vehicle
- Once installed, it never has to be serviced and requires no maintenance
- It is cost effective. Units range in price from \$100-\$485. Over time, it pays for itself in fuel cost savings! Thereafter, fuel costs saved go back to the user.
- Provides the three-tiered benefit of improvement in emissions, performance and fuel economy

## #4 ECO-SYSTEMS and the LONG HAUL



# SOUTHWEST I.S.D. and ECO-SYSTEMS

SAN ANTONIO, TEXAS

Installation of an ECO #3 on an International Engine  
Southwest I.S.D spec's ECO-SYSTEMS on new Purchases

Southwest's entire fleet using ECO-Systems to Voluntarily Lower Emissions





# City of Victoria, Texas

City of Victoria Crown Vic with ECO #2

Chevrolet 1500 with ECO #3

2003 Freightliner Truck & CAT Engine with ECO #4



# WHEELER COUNTY PRECINCTS 1, 2, & 3

Wheeler County Texas

CATERPILLAR

ECO #4 on MOTORGRADER



CATERPILLAR

ECO #4 ON MOTORGRADER



CATERPILLAR

ECO #4 ON FRONT END LOADER



# Air Quality Benefits

- EcoSystems units have demonstrated reductions of NO<sub>x</sub>, HC, CO, and PM during field testing and in an EPA certified emissions testing laboratory
- Emissions Technology of Texas was awarded a grant by the Texas Council on Environmental Technology (TCET), now TCEQ/NTRD to conduct laboratory emissions testing of the EcoSystems technology
- The emissions tests were performed at Wallace Environmental Testing Laboratories, Inc. in Houston during the summer of 2004 and showed significant reductions of NO<sub>x</sub> and hydrocarbons



# The Project

## Test Vehicles

Test Vehicle	Engine	Mileage
1998 Dodge Ram 1500	3.9L, V-6	99,814 miles
1996 GMC Safari Van	4.3L, V-6	109,780 miles
2000 Chevrolet 1500	5.0L, V-8	130,637 miles
1997 Ford F350	5.8L, V-8	130,890 miles

# Test Results

**Table 3. Test Results: Range of Reductions for Nitrogen Oxides (NOx)**

Vehicle	Highest NOx	Lowest NOx	Range of Reduction
1998 Ram 1500	.960 ppm*	.770 ppm	-19.8%
1996 GMC Safari	.669 ppm	.604 ppm	-9.8%
2000 Chevrolet	.960 ppm	.736 ppm	-23.4%
1997 Ford F350	3.669 ppm	3.502 ppm	-4.6%

**\*Parts per million**



# Project Final Report

[www.tnrcc.state.tx.us/oprd/sips/02-R01-27G](http://www.tnrcc.state.tx.us/oprd/sips/02-R01-27G)

# Recent Public Works Customers

- Victoria County
- Wilson County
- Collin County
- City of San Antonio EMS & Public Works
- City of Cedar Park
- Wheeler County
- City of San Marcos
- City of Corpus Christi
- Other Local Governments

# For More Information:

- [www.ecofuelsystems.com](http://www.ecofuelsystems.com)
- Ben Talamantez  
(210) 842-0703  
or your nearest Distributor.

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